Avigilon Control Center Server User guide

Version 3.8

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CHAPTER

1

INTRODUCTION

What is the Avigilon Control Center Server?

The Control Center Server software is an application that captures and records image data from cameras and encoders and serves it to the client software. This software is a Windows service and does not require user intervention to function. It starts running automatically when Windows starts.

System Requirements

The recommended system requirements to run the Control Center Server software with a recording capacity of 32 MB/s from up to 24 cameras are as follows:

- **OS:** Windows XP SP2, Vista, Server 2003 SP2
- **CPU:** Intel Quad Core Xeon E5320 Processor
- **System RAM:** 4 GB
- **Network Card:** 1 Gbps Intel Pro/1000 or Broadcom NetXtreme II Server Adapters
- **Hard Drives:** SATA-II 7200 RPM Enterprise Class

The recommended system requirements to run the Control Center Server software with a recording capacity of 10 MB/s from up to 16 cameras and the ability to view live and recorded images data locally are as follows:

- **OS:** Windows XP SP2, Vista, Server 2003 SP2
- **CPU:** Intel Quad Core Xeon E5405 Processor
- **System RAM:** 2 GB
- **Video Card:** DirectX 9.0c compliant with 128MB RAM (nVidia 6600 or better, or ATI X1300 or better)
- **Network Card:** 1 Gbps
- **Hard Drives:** SATA-II 7200 RPM Enterprise Class

The recommended system requirements to run the Control Center Server software on a laptop with a recording capacity of 5 MB/s from up to 4 cameras and the ability to view live and recorded images data locally are as follows:

- **OS:** Windows XP SP2, Vista
- **CPU:** Intel Core 2 Duo Processor 2 Ghz or better
- **System RAM:** 2 GB
- **Video Card:** DirectX 9.0c compliant with 128MB RAM (nVidia 6600 or better, or ATI X1300 or better)
- **Network Card:** 1 Gbps
- **Hard Drives:** SATA-II

Who Should Use this Guide?

This guide is intended for anyone who uses Avigilon Control Center Server software.

To use this guide, you should:

• Have a working knowledge of surveillance operations

• Be familiar with the Windows® operating system

This guide assumes that:

• All the hardware, software, and network components of your system are installed, configured, and operating correctly.

For More Information

Visit Avigilon at http://www.avigilon.com/ for additional product documentation.

Support

For additional support information, visit http://www.avigilon.com/support/.

Regular Avigilon Customer Support Center hours of operation are from 8:30 a.m. to 5:00 p.m. Pacific Standard Time (PST) and can be reached by calling the toll-free number: +1.888.281.5182.

E-mails can be sent to: support@avigilon.com.

For emergency technical support 24 hours a day, 7 days a week, please call the Avigilon Emergency Technical Support Hotline at +1.604.506.3117.

Upgrades

Software and firmware upgrades will be made available via download or CD as they become available

CHAPTER

2

UNDERSTANDING THE APPLICATION

Avigilon Control Center Server runs in the background as a Windows service. It is configured to automatically start when the operating system is booted. The properties of the service can be configured in the Services window which is can be accessed through **Control Panel>Administrative Tools>Services**.

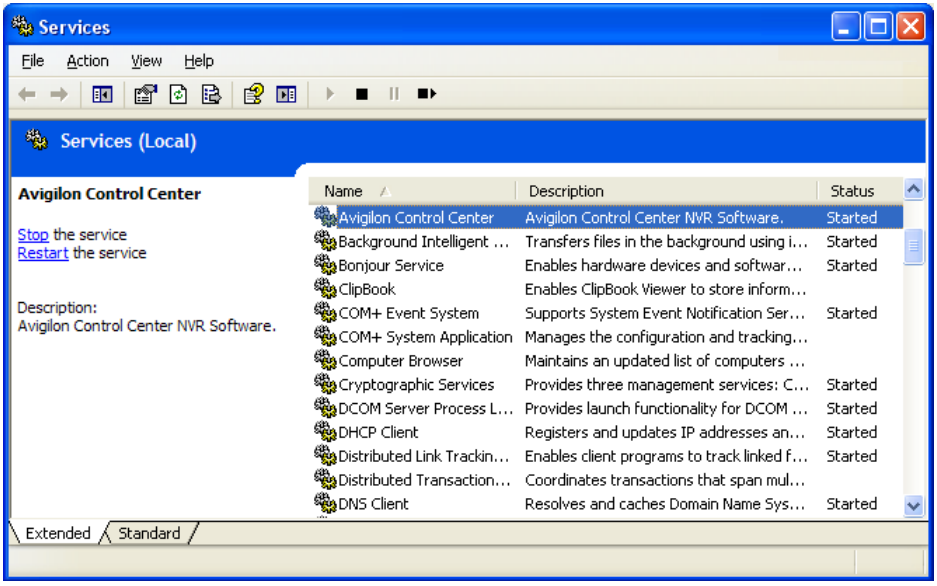

Figure 2.1: Windows Services

Along with Control Center Server, the Control Center Admin Tool is installed. The Admin Tool is run in the Windows system tray and can be opened by double-clicking on the Avigilon Control Center icon.

Figure 2.2: Control Center Admin Tool

The Admin Tool allows you to administer the licensing, network, and storage settings for the Control Center Server software.

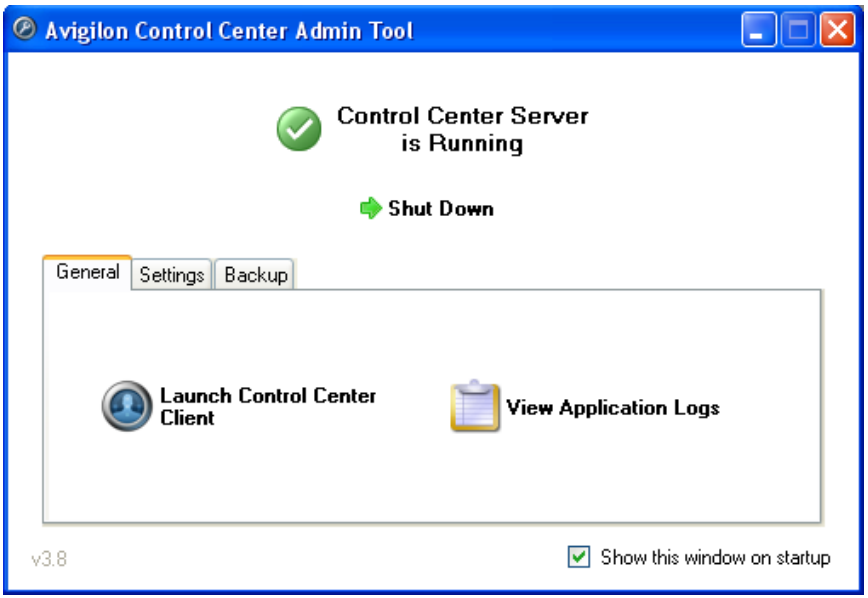

Figure 2.3: Control Center Admin Tool

CHAPTER

3

SETUP

Before you begin using Avigilon Control Center, you must setup your system by licensing the Control Center Server software, configuring the NVR storage settings, and configuring the NVR network settings.

Licensing the NVR

To access the NVR licensing:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 3.1: Windows System Tray

2 In the Control Center Admin Tool Settings tab, click **Manage Licensing**.

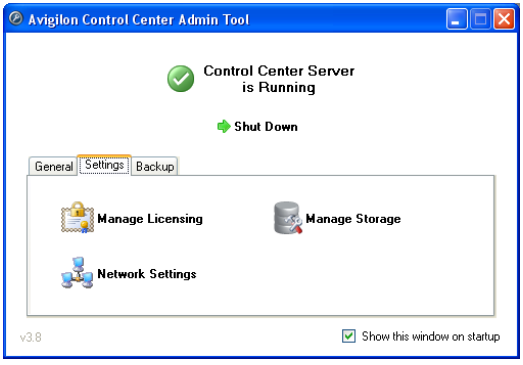

Figure 3.2: Control Center Admin Tool

3 In the License Activation window, you can see all valid product keys and current available access rights.

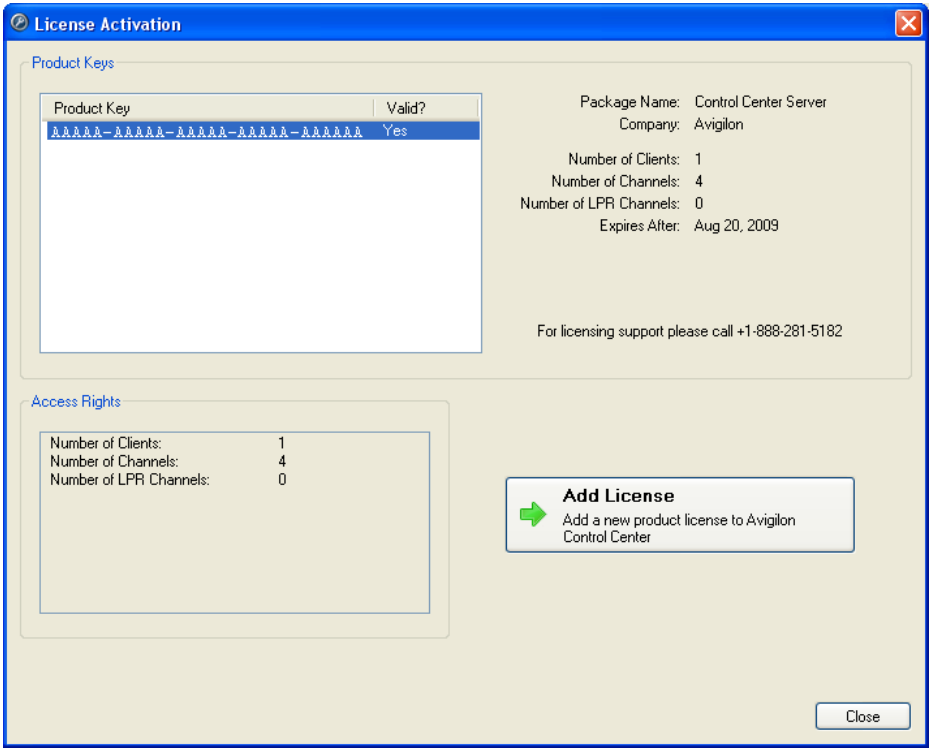

Figure 3.3: License Activation Dialog

To add an NVR license (with internet connection):

1 Open the License Activation dialog. For more information, see “To access the NVR licensing:” on page 3-5.

2 Click **Add License**.

3 If an internet connection was detected, click **Internet Activation (Recommended)**. If an internet connection was not detected, see “To add an NVR license (without internet connection):” on page 3-8.

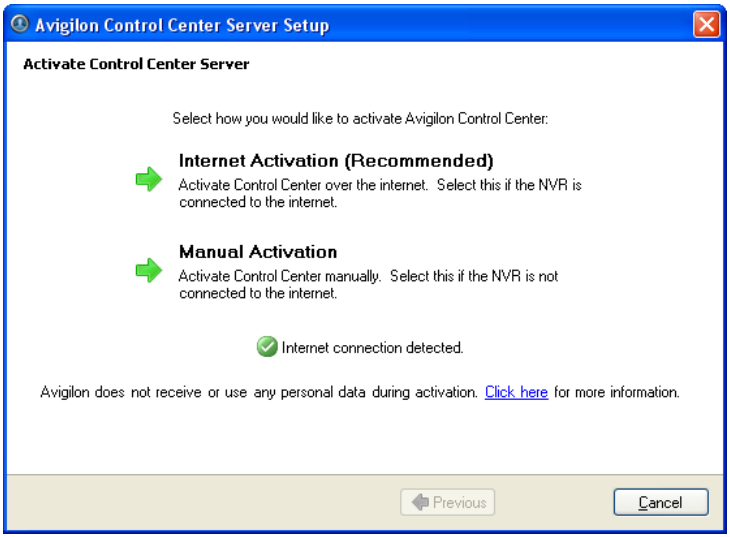
Avigilon Control Center Server Setup
Activate Control Center Server
Select how you would like to activate Avigilon Control Center:
Internet Activation (Recommended)
Activate Control Center over the internet. Select this if the NVR is connected to the internet.
Manual Activation
Activate Control Center manually. Select this if the NVR is not connected to the internet.
Internet connection detected.
Avigilon does not receive or use any personal data during activation. Click here for more information.
Previous
Cancel

Figure 3.4: License Activation Method Dialog

4 Enter the product key, a check mark will appear if it is valid. Click **Next**.

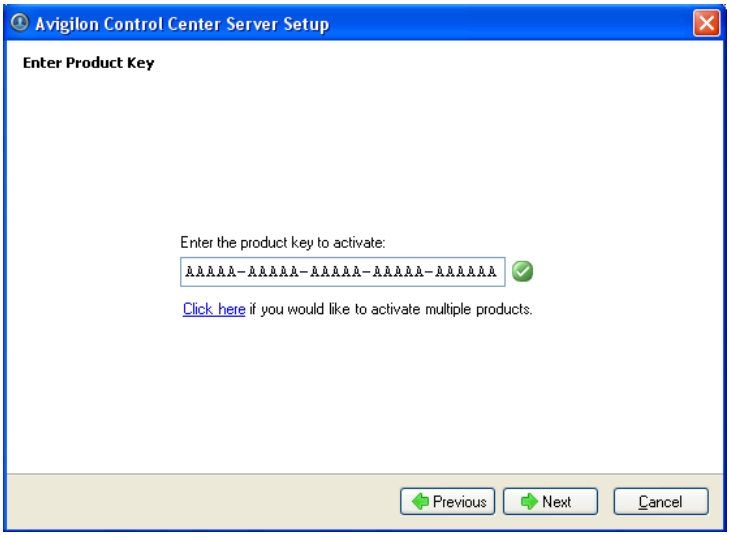

Figure 3.5: Product Key Dialog

5 Enter product registration information to receive product updates from Avigilon. Click **Next**.

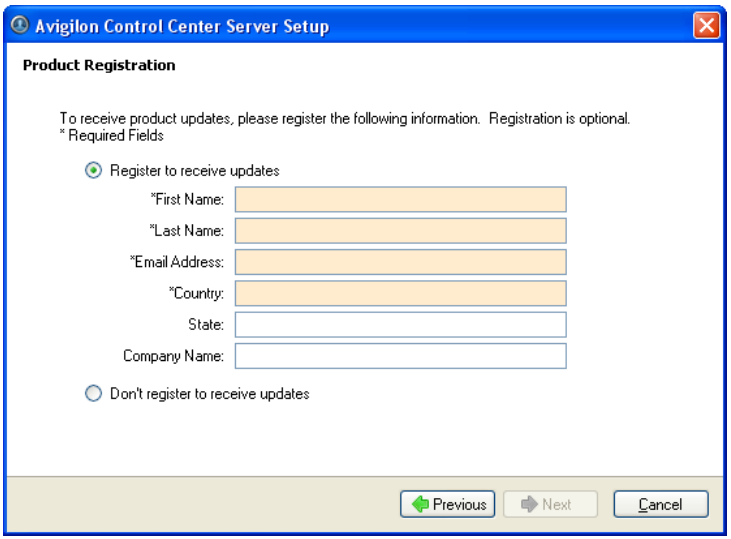

Figure 3.6: Registration Dialog

6 The software will connect to the Avigilon licensing server and activate the license. Click **Next**.

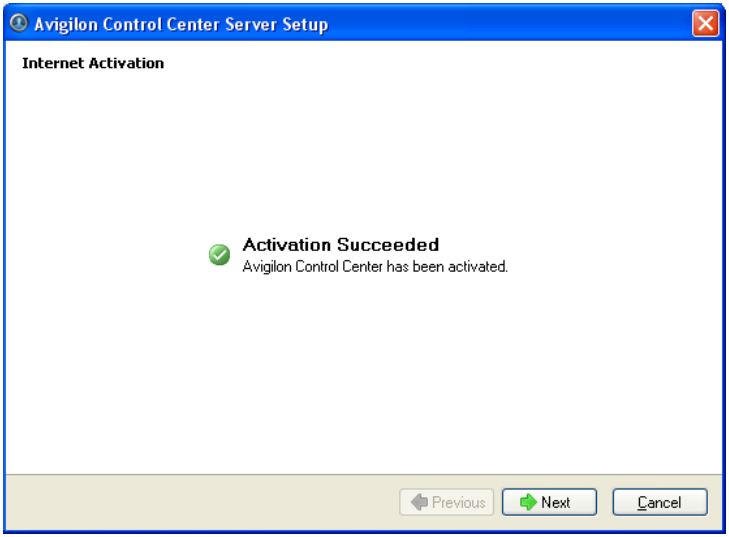

Figure 3.7: Activation Dialog

To add an NVR license (without internet connection):

1 Open the License Activation dialog. For more information, see “To access the NVR licensing:” on page 3-5.

2 Click **Add License**.

3 If no internet connection was detected, click **Manual Activation**.

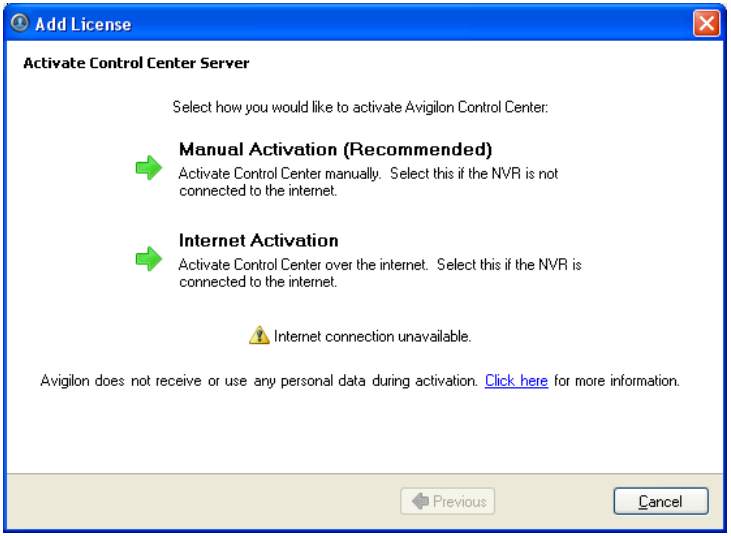
Add License
Activate Control Center Server
Select how you would like to activate Avigilon Control Center:
Manual Activation (Recommended)
Activate Control Center manually. Select this if the NVR is not connected to the internet.
Internet Activation
Activate Control Center over the internet. Select this if the NVR is connected to the internet.
Internet connection unavailable.
Avigilon does not receive or use any personal data during activation. Click here for more information.
Previous
Cancel

Figure 3.8: License Activation Method Dialog

4 Click **Step 1: Generate Activation File**.

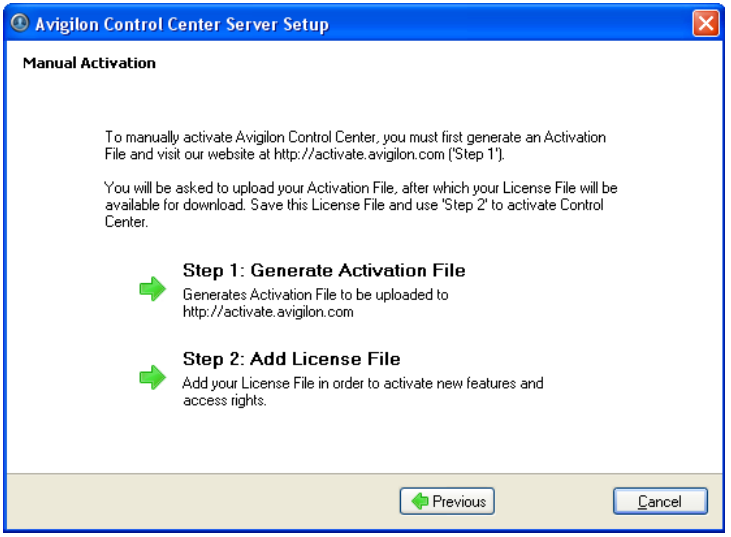
Avigilon Control Center Server Setup
Manual Activation
To manually activate Avigilon Control Center, you must first generate an Activation File and visit our website at http://activate.avigilon.com ('Step 1').
You will be asked to upload your Activation File, after which your License File will be available for download. Save this License File and use 'Step 2' to activate Control Center.
Step 1: Generate Activation File
Generates Activation File to be uploaded to http://activate.avigilon.com
Step 2: Add License File
Add your License File in order to activate new features and access rights.
Previous
Cancel

Figure 3.9: Manual Activation Dialog

5 Enter the product key, a check mark will appear if it is valid. Click **Next**.

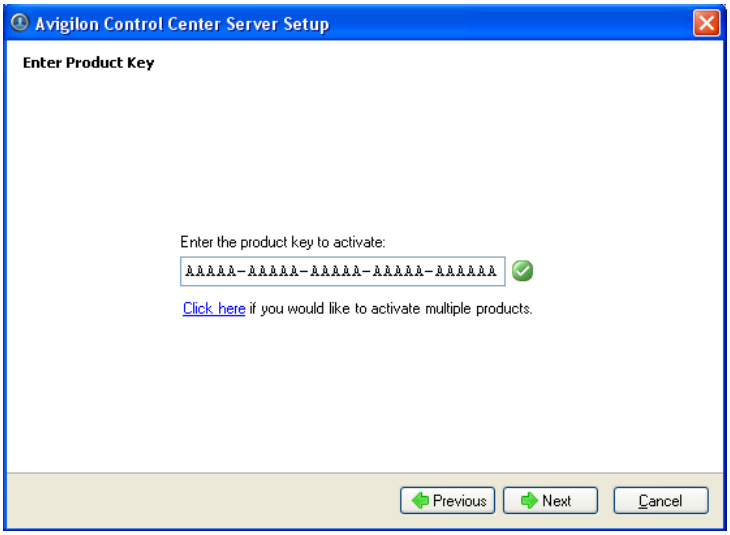

Figure 3.10: Product Key Dialog

6 Select the file name for the Activation File and the location to save it. Click **Next**.

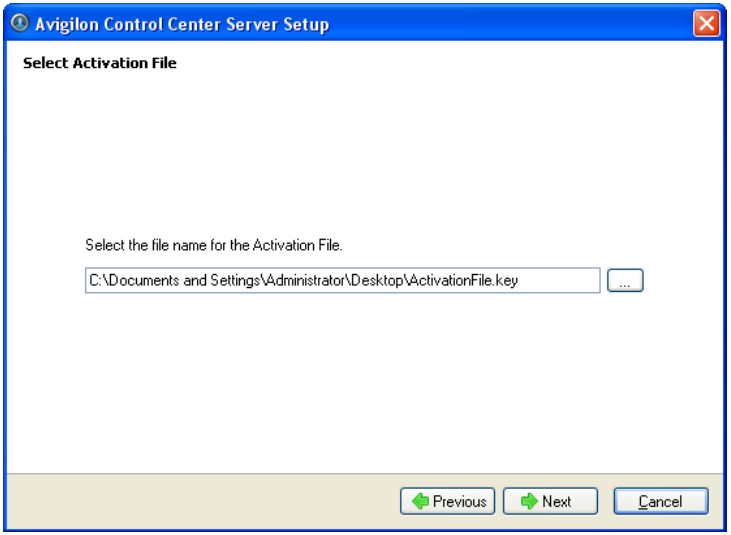

Figure 3.11: Product Key Dialog

7 The activation file is saved at the location you specified. Copy this file to a computer with access to the internet. Click **Next**.

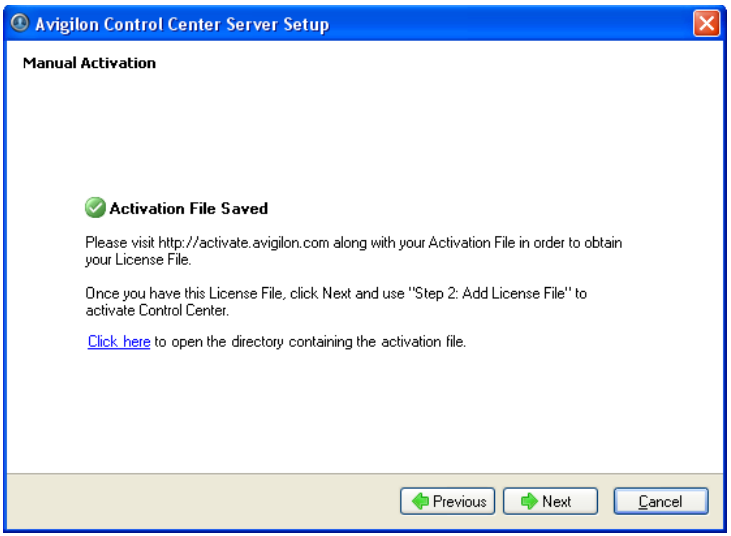
Avigilon Control Center Server Setup
Manual Activation
Activation File Saved
Please visit http://activate.avigilon.com along with your Activation File in order to obtain your License File.
Once you have this License File, click Next and use "Step 2: Add License File" to activate Control Center.
Click here to open the directory containing the activation file.
Previous
Next
Cancel

Figure 3.12: Activation File Saved Dialog

8 Open a web browser and go to http://activate.avigilon.com. Enter the location of your activation file and click **Upload Activation File**.

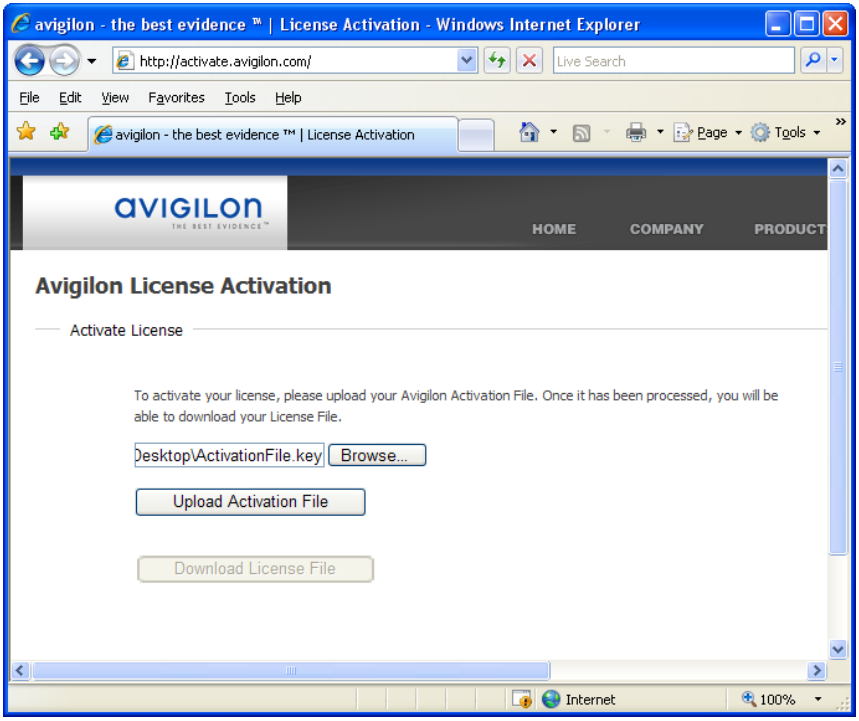
avigilon - the best evidence ™ | License Activation - Windows Internet Explorer
http://activate.avigilon.com/
Live Search
File Edit View Favorites Tools Help
avigilon - the best evidence ™ | License Activation
Page Tools
AVIGILON
HOME COMPANY PRODUCT
Avigilon License Activation
Activate License
To activate your license, please upload your Avigilon Activation File. Once it has been processed, you will be able to download your License File.
Desktop\ActivationFile.key
Browse...
Upload Activation File
Download License File
Internet
100%

Figure 3.13: Activation Website

9 Download the License File and copy it to the NVR computer to finish licensing. Enter product registration information to receive product updates from Avigilon and click **Register**.

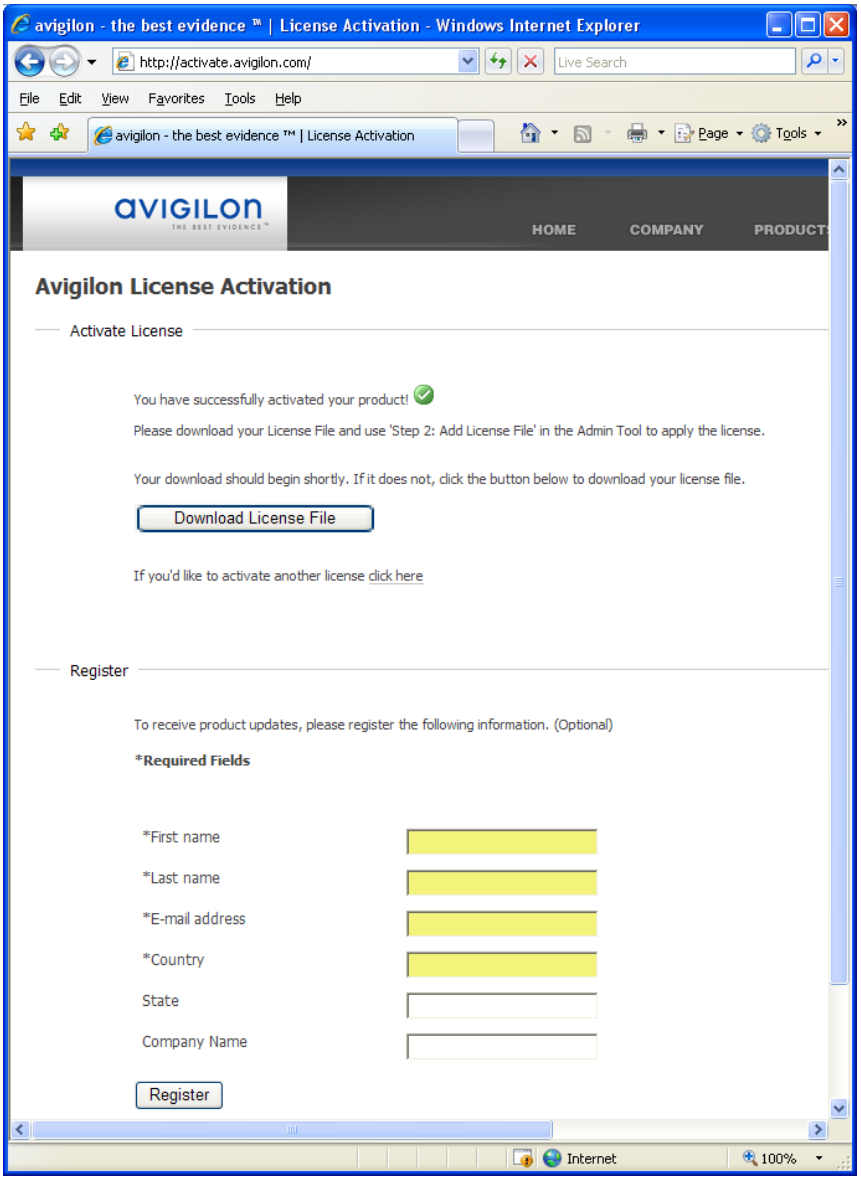
avigilon - the best evidence ™ | License Activation - Windows Internet Explorer
http://activate.avigilon.com/
Live Search
File Edit View Favorites Tools Help
avigilon - the best evidence ™ | License Activation
Page Tools
AVIGILON
HOME COMPANY PRODUCT
Avigilon License Activation
Activate License
You have successfully activated your product!
Please download your License File and use 'Step 2: Add License File' in the Admin Tool to apply the license.
Your download should begin shortly. If it does not, click the button below to download your license file.
Download License File
If you'd like to activate another license click here
Register
To receive product updates, please register the following information. (Optional)
*Required Fields
*First name
*Last name
*E-mail address
*Country
State
Company Name
Register
Internet
100%

Figure 3.14: Registration Website

10 Click **Step 2: Add License File**.

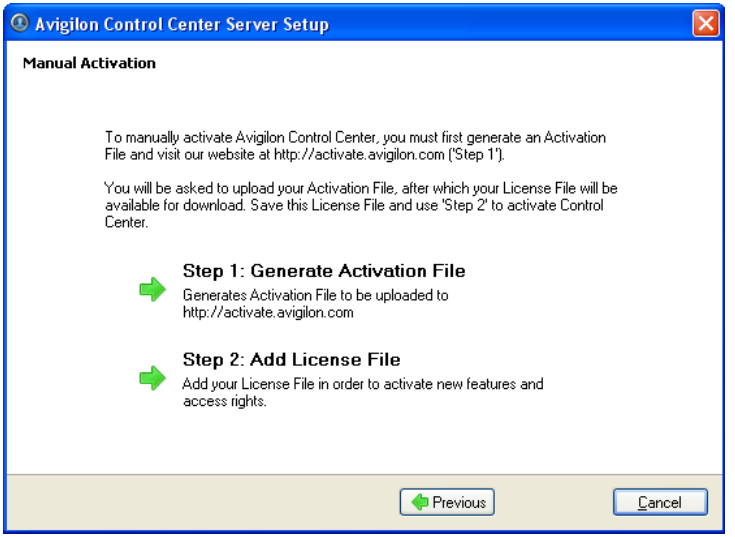
Avigilon Control Center Server Setup
Manual Activation
To manually activate Avigilon Control Center, you must first generate an Activation File and visit our website at http://activate.avigilon.com ('Step 1').
You will be asked to upload your Activation File, after which your License File will be available for download. Save this License File and use 'Step 2' to activate Control Center.
Step 1: Generate Activation File
Generates Activation File to be uploaded to http://activate.avigilon.com
Step 2: Add License File
Add your License File in order to activate new features and access rights.
Previous
Cancel

Figure 3.15: Manual Activation Dialog

11 Enter the location of the license file and click **Next**.

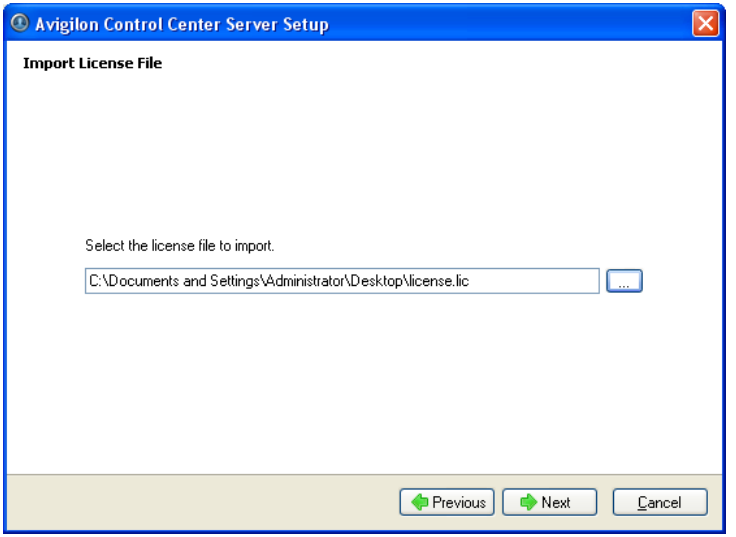

Figure 3.16: Import License File Dialog

12 The software will activate the license. Click **Next**.

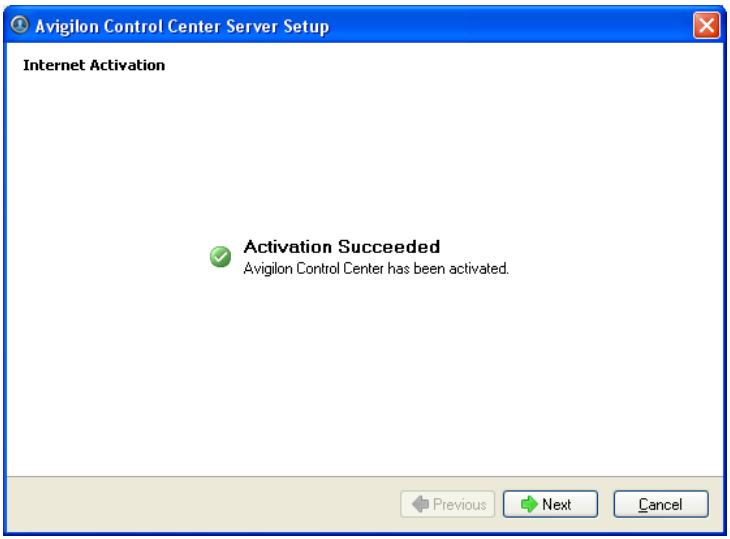

Figure 3.17: Activation Dialog

Configuring the NVR Storage Settings

To access the NVR storage configuration:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 3.18: Windows System Tray

2 In the Control Center Admin Tool Settings tab, click **Manage Storage**. The Control Center Server must be shut down before the storage configuration can be edited.

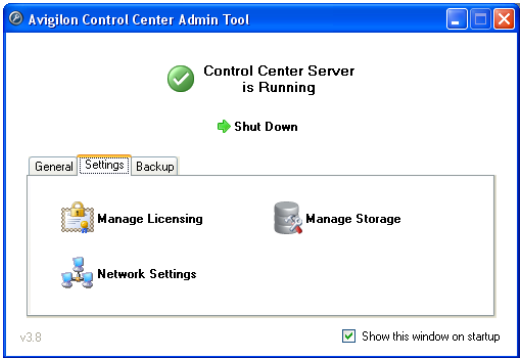

Figure 3.19: Control Center Admin Tool

3 In the Manage Storage window, you can see the current storage configuration.

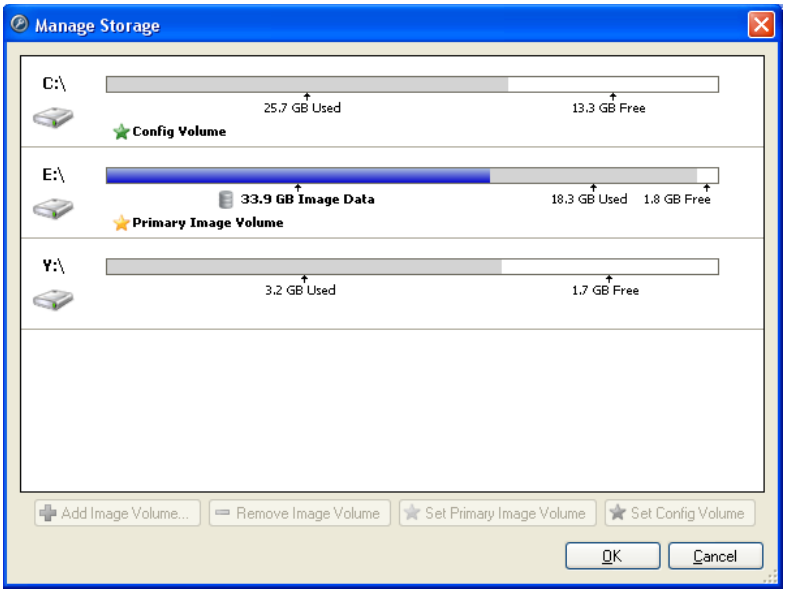

Figure 3.20: Manage Storage Dialog

To setup initial NVR storage configuration:

1 When the Control Center Admin Tool detects that there is no existing storage configuration it will launch the Set Up Storage Configuration window with a recommended storage configuration.

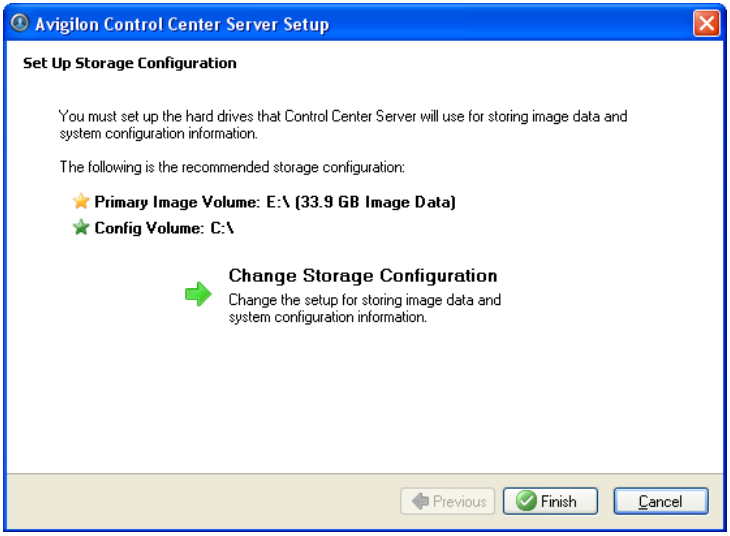
Avigilon Control Center Server Setup
Set Up Storage Configuration
You must set up the hard drives that Control Center Server will use for storing image data and system configuration information.
The following is the recommended storage configuration:
Primary Image Volume: E:\ (33.9 GB Image Data)
Config Volume: C:\
Change Storage Configuration
Change the setup for storing image data and system configuration information.
Previous
Finish
Cancel

Figure 3.21: Set Up Storage Configuration Dialog

2. By default the software attempts to put the Primary Image Volume on the largest available drive and attempts to put the Config Volume on the second largest available drive. If the recommended configuration is acceptable click **Finish**, if you want to change the configuration click **Change Storage Configuration**.
3. Select the drive you want to store the Config Volume and click **Set Config Volume**. The Config Volume stores all of the NVR settings and it is recommended to have the Config Volume on a separate drive from the Primary Image Volume.

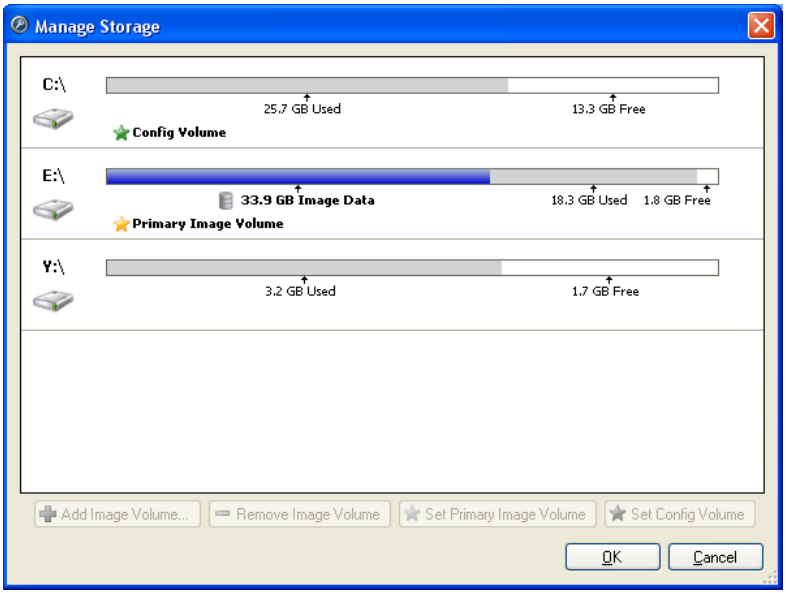

Figure 3.22: Manage Storage Dialog

4. If you are not satisfied with the location or size of the Primary Image Volume, select the drive with the Primary Image Volume and click **Remove Image Volume**. Select the drive that you want to store the Primary Image Volume on and click **Add Image Volume**. Select the size of the image volume and click **OK**.

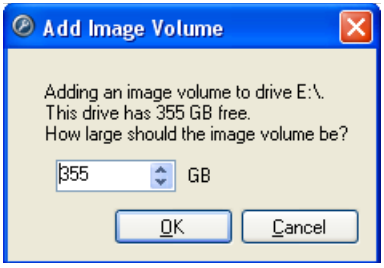

Figure 3.23: Add Image Volume Dialog

5. If you want to add an additional Image Volume to another drive, select the drive and click **Add Image Volume**. Select the size of the image volume and click **OK**.
6. If you are satisfied with the storage configuration, click **OK**.

To add an additional image volume:

1. Open the Manage Storage dialog. For more information, see “To access the NVR storage configuration:” on page 3-14.
2. Select the drive you want to add the additional image volume to and click **OK**.
3. Select the size of the image volume and click **OK**.

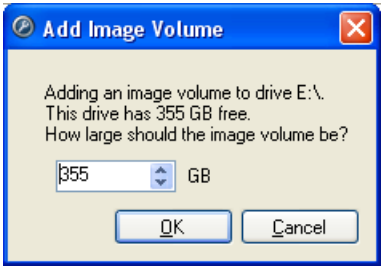

Figure 3.24: Add Image Volume Dialog

4. Click **OK**.

To erase storage configuration:

1. Open the Manage Storage dialog. For more information, see “To access the NVR storage configuration:” on page 3-14.
2. Click **Erase All Data**.
3. Click **Yes**. Note that all image data and NVR settings will be lost.
4. You will need to create a new storage configuration before you can run Control Center Server again.

Configuring the NVR Network Settings

The NVR communicates with the Control Center Client software through a range of UDP and TCP ports. These port ranges only need to be changed if the Control Center Client is trying to access two or more NVRs that are behind the same NAT device (e.g. router) or if there is a port conflict with other software running on the same computer as the Control Center Server software

To change the NVR network port range:

1. From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 3.25: Windows System Tray

2. In the Control Center Admin Tool Settings tab, click **Network Settings**.

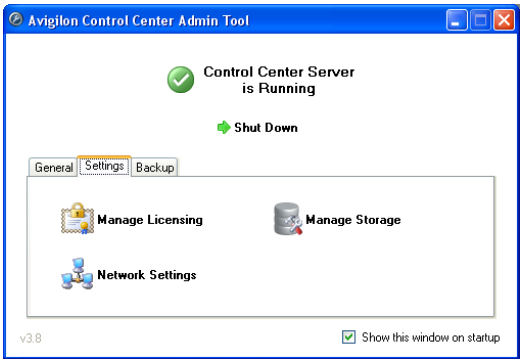

Figure 3.26: Control Center Admin Tool

3 Enter the desired base port. The UDP and TCP port ranges that are used by the Control Center Server software are updated as the base port changes. Click **OK**.

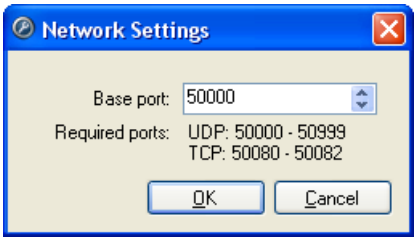

Figure 3.27: Control Center Admin Tool

CHAPTER

4

ADMINISTERING THE APPLICATION

Starting Up and Shutting Down Control Center Server

Control Center Server software automatically starts when Windows starts but it can be manually shut down and started through the Control Center Admin Tool.

To shut down Control Center Server:

1. From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.1: Windows System Tray

2. In the Control Center Admin Tool, click **Shut Down**. When Control Center Server is properly shut down, the status in the Admin Tool will indicate this.

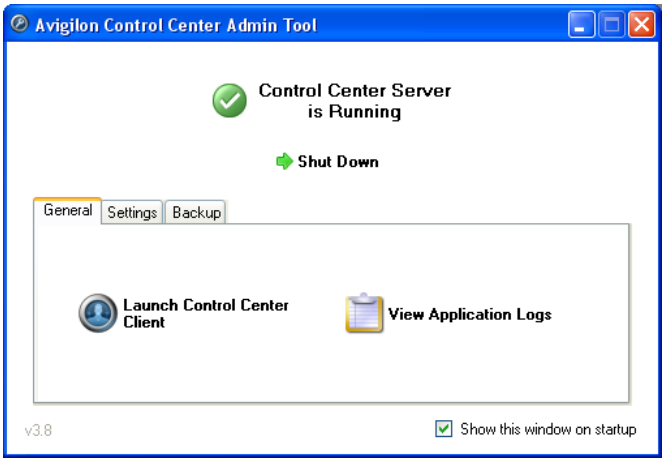

Figure 4.2: Control Center Admin Tool

To start up Control Center Server:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.3: Windows System Tray

2 In the Control Center Admin Tool, click **Start Up**. When Control Center Server is properly started, the status in the Admin Tool will indicate this.

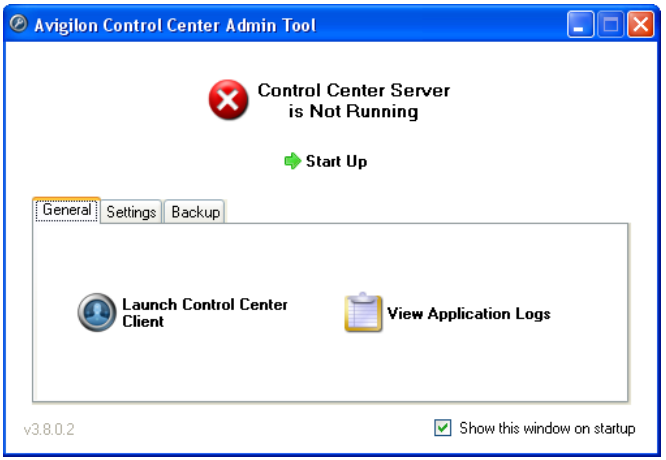

Figure 4.4: Control Center Admin Tool

Starting Control Center Client

Control Center Client software can be started through the Control Center Admin Tool. If the Control Center Client is not installed the Admin Tool will prompt you to install it.

To start Control Center Client:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.5: Windows System Tray

2 In the Control Center Admin Tool General tab, click **Launch Control Center Client**.

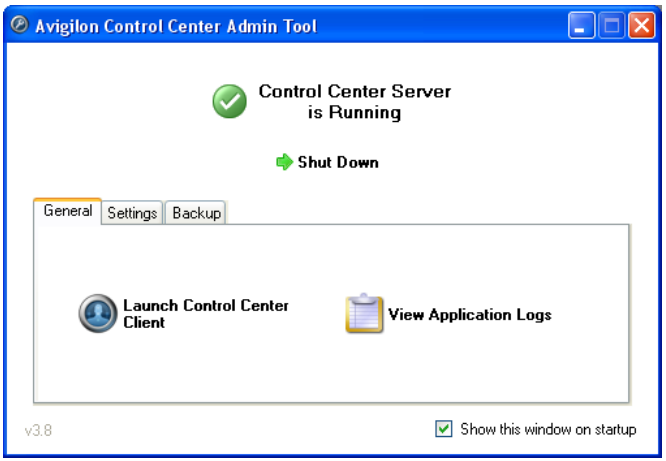

Figure 4.6: Control Center Admin Tool

Viewing Application Logs

You can view Control Center Server application error logs through the Control Center Admin Tool. This can assist in diagnosing problems with your system.

To view application logs:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.7: Windows System Tray

2 In the Control Center Admin Tool General tab, click **View Application Logs**.

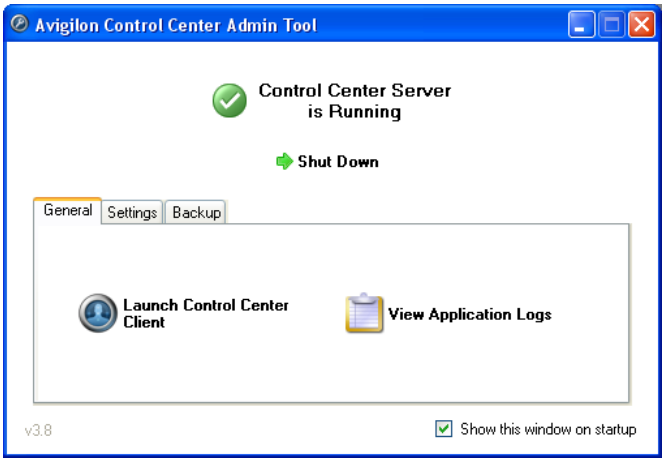

Figure 4.8: Control Center Admin Tool

3 When you have finished viewing the logs, click **OK**.

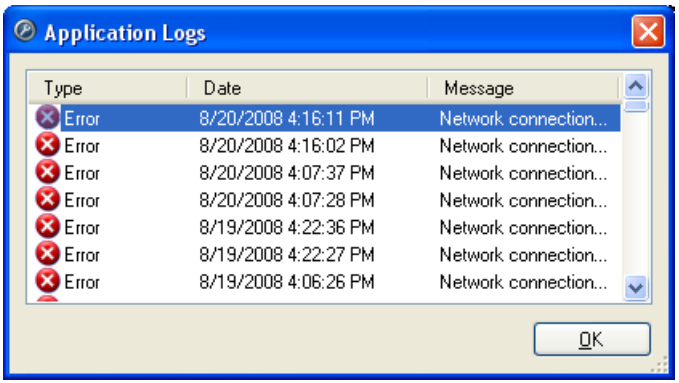
Application Logs
Type
Date
Message
Error 8/20/2008 4:16:11 PM Network connection...
Error 8/20/2008 4:16:02 PM Network connection...
Error 8/20/2008 4:07:37 PM Network connection...
Error 8/20/2008 4:07:28 PM Network connection...
Error 8/19/2008 4:22:36 PM Network connection...
Error 8/19/2008 4:22:27 PM Network connection...
Error 8/19/2008 4:06:26 PM Network connection...
OK

Figure 4.9: Application Logs Dialog

Exporting and Importing Settings

After you have configured your NVR you can export the NVR settings and then import the settings on a different NVR.

To export NVR settings:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.10: Windows System Tray

2 In the Control Center Admin Tool Backup tab, click **Export Settings**. The Control Center Server must be shut down before the settings can be exported.

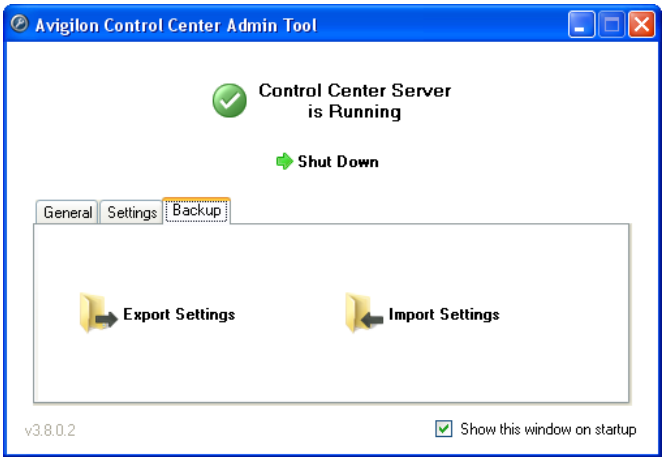

Figure 4.11: Control Center Admin Tool

3 In the Export Settings window, select the settings you want to export and click **OK**.

Figure 4.12: Export Settings Dialog

4 In the Select File to Export To window, browse to a location where you want the exported settings to be stored, type a name, and click **Save**.

5 Click **OK.**

To import NVR settings:

1 From the Windows system tray, double-click on the Control Center icon to open the Control Center Admin Tool.

Figure 4.13: Windows System Tray

2 In the Control Center Admin Tool Backup tab, click **Import Settings**. The Control Center Server must be shut down before the settings can be imported.

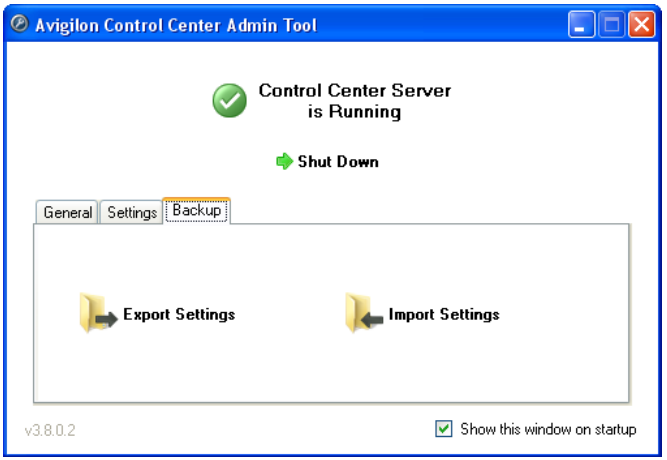

Figure 4.14: Control Center Admin Tool

3 In the Select File to Import window, browse to the location of the file you want to import.

4 In the Import Settings window, select the settings you want to import and click **OK**.

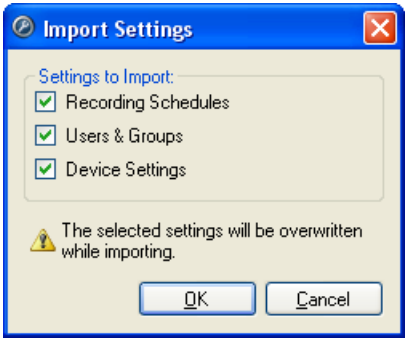

Figure 4.15: Import Settings Dialog

5 Click **OK.**